

CLAIMS

1. A snap connection for sealed and releasable connection of a first tube end (1) with a second tube end (20), with spring arms (33), with a first outer stop projection (14) on a first tube end (10), with a first elastically deformable ring (31) connected with the spring arms (33), and with two first inner stop cams (34) on the first ring cooperating with the first outer stop projection (14), characterized by a second outer stop projection (23) on the second tube end (20), a second elastically deformable ring (32) connected with the spring arms (33) with distance from the first ring (31), and by two, second inner stop cams (35) on the second ring (32) cooperating with the second outer stop projection (23).
2. The snap connection according to claim 1, characterized in that the spring arms (33), the rings (31, 32) connected to it, as well as the inner stop cams (34, 35) provided on these form a double-connection element (30).
3. The snap connection according to claim 2, characterized in that the double-connection element (30) is made as a plastic, injection molding part.
4. The snap connection according to claim 3, characterized in that for the plastic, injection molding part as plastic material, a reinforced polyamide is used.
5. The snap connection according to claim 4, characterized in that the polyamide is selected from the group consisting of polyamide 6, polyamide 66, polyamide 46, polyamide 11, polyamide 12, and partially aromatic, part-crystalline copolyamides.

6. The snap connection according to claim 4 or 5, characterized in that fibers and/or minerals are used as reinforcement means for the polyamide.
7. The snap connection according to claim 6, characterized in that the fibers are selected from the group consisting of glass fibers, carbon fibers, and aramid fibers.
8. The snap connection according to one of claims 1-7, characterized in that two further inner stop cams (36) are provided parallel and with distance to the first inner stop cams (34) on the first ring (31) with formation of an engagement groove (37) for the first outer stop projection (14) on the first tube end (10).
9. The snap connection according to one of claims 1-8, characterized in that both tube ends (10, 20) or end sections (11, 21) of the tube ends can be inserted into one another.
10. The snap connection according to claim 9, characterized in that an end section (21) of the second tube end (20) is widened in stages for receiving an end section (11) of the first tube end (10) and that the stepped widening forms the second outer stop projection (23).
11. The snap connection according to claim 9 or 10, characterized in that the end section (21) of the second tube end (20) is provided on the inside with a sealing surface.
12. The snap connection according to one of claims 9, 10, or 11, characterized in that on the outside of the end section (11) of the first tube end (10), at least one circumferential sealing groove (12) for at least one

sealing element (13) is provided, wherein said at least one sealing element is preferably an O-ring, a gasket cord, or a lip seal.

13. The snap connection according to one of claims 1-12, characterized in that the first and/or the second tube end comprises a plastic.
14. The snap connection according to claim 13, characterized in that the plastic is selected from the group consisting of polypropylene, polybutylene-terephthalate, polyphenylene-sulfide, and polyamides, wherein these polymers preferably also contain additives and/or reinforcement means.
15. The snap connection according to claim 14, characterized in that the polyamides include the group polyamide 6, polyamide 66, polyamide 11, polyamide 12, polyphthalamides, polyamide elastomers, and polyamide mixtures.
16. The snap connection according to one of claims 13-15, characterized in that the first tube end (10) is an extrusion blow-molding part.
17. The snap connection according to one of claims 13-15, characterized in that the first tube end (10) is part of a continually extruded corrugated tube.
18. The snap connection according to one of claims 13-15, characterized in that the second tube end (20) is an injected molding part, in particular, a connection piece on an injection-molded container.
19. The snap connection according to one of claims 1-17, characterized in that the second tube end (20) is a metal part, in particular, a metal connecting part.

20. The snap connection according to one of claims 1-19, characterized in that the diameter of the two tube ends (10, 20) lies in the range of 30 to 70 mm.
21. The snap connection according to one of the preceding claims, characterized in that the two tube ends (10, 20) are formed to be rotationally symmetrical.
22. The snap connection according to one of claims 1-20, characterized in that both tube ends (10, 20) are protected against twisting by means of a non-rotationally symmetrical design.
23. The snap connection according to one of the preceding claims, characterized in that it is an air channel connection for the intake or charging area of an automobile engine.